Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Original) An exposure apparatus comprising:

a projection system having an exposure field that is decentered with respect to an optical axis in order to project a pattern formed on a mask onto a photosensitive substrate;

an illumination optical system that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system;

a drive that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system;

a first illumination adjustment mechanism that adjusts an illumination characteristic along the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask;

a second illumination adjustment mechanism that adjusts an illumination characteristic in a direction crossing the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask;

a first telecentricity adjustment mechanism that applies an oblique component to telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask; and

a second telecentricity adjustment mechanism that adjusts telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

2. (Original) The exposure apparatus of claim 1, wherein the illumination optical system forms an arcuate illumination field on the mask in the direction crossing the scanning exposure direction.

3. (Original) The exposure apparatus of claim 1, wherein the first illumination adjustment mechanism applies an illumination distribution component that is inclined along the scanning exposure direction, and the second illumination adjustment mechanism applies an illumination distribution component that is inclined along the direction crossing the scanning exposure direction.

4. (Original) The exposure apparatus of claim 1, wherein the illumination optical system includes a plurality of illumination optical components, and the first and second illumination adjustment mechanisms move or incline at least one common illumination optical component among the plurality of illumination optical components in mutually different directions.

5. (Original) The exposure apparatus of claim 4, wherein the first telecentricity adjustment mechanism adjusts an illumination optical component that is different from an illumination optical component that is adjusted by the first and second illumination adjustment mechanisms, and the second telecentricity adjustment mechanism adjusts an illumination optical component that is different from the illumination optical component adjusted by the first telecentricity adjustment mechanism.

6. (Original) The exposure apparatus of claim 4, wherein the first telecentricity adjustment mechanism adjusts an illumination optical component that is different from an illumination optical component that is adjusted by the first and second illumination adjustment mechanisms, and the second telecentricity adjustment mechanism adjusts an illumination optical component that is the same as the illumination optical component adjusted by the first telecentricity adjustment mechanism.

7. (Original) The exposure apparatus of claim 1, wherein the illumination optical system includes a plurality of illumination optical components, and the first and second

illumination adjustment mechanisms move or incline mutually different optical components among the plurality of illumination optical components in mutually different directions.

8. (Original) The exposure apparatus of claim 7, wherein the first telecentricity adjustment mechanism adjusts an illumination optical component that is different from an illumination optical component that is adjusted by the first and second illumination adjustment mechanisms, and the second telecentricity adjustment mechanism adjusts an illumination optical component that is different from the illumination optical component adjusted by the first telecentricity adjustment mechanism.

9. (Original) The exposure apparatus of claim 7, wherein the first telecentricity adjustment mechanism adjusts an illumination optical component that is different from an illumination optical component that is adjusted by the first and second illumination adjustment mechanisms, and the second telecentricity adjustment mechanism adjusts an illumination optical component that is the same as the illumination optical component adjusted by the first telecentricity adjustment mechanism.

10. (Original) The exposure apparatus of claim 1, wherein the illumination optical system includes a plurality of reflective components, and the first illumination adjustment mechanism, the second illumination adjustment mechanism, the first telecentricity adjustment mechanism, and the second telecentricity adjustment mechanism respectively adjust a position of at least some of the reflective components of the illumination optical system.

11. (Original) The exposure apparatus of claim 10, wherein the first and second illumination adjustment mechanisms incline a common reflective component about mutually different axes of rotation.

12. (Original) The exposure apparatus of claim 10, wherein the first and second telecentricity adjustment mechanisms move the same reflective component in mutually different directions.

13. (Original) The exposure apparatus of claim 10, wherein the first and second illumination adjustment mechanisms move a common reflective component in different directions.

14. (Original) The exposure apparatus of claim 11, wherein the first and second telecentricity adjustment mechanisms move the same reflective component in mutually different directions.

15. (Original) The exposure apparatus of claim 14, wherein the first and second illumination adjustment mechanism adjust a reflective component that is different from a reflective component adjusted by the first and second telecentricity adjustment mechanisms.

16. (Previously Presented) The exposure apparatus of claim 1, wherein the illumination optical system comprises:

a radiation source that outputs a radiation beam;

a reflective optical integrator that makes uniform an illumination distribution of radiation from the radiation beam; and

a radiation guiding optical system arranged in an optical path between the radiation source and the reflective optical integrator, and that guides the radiation beam from the radiation source to the reflective optical integrator.

17. (Original) The exposure apparatus of claim 1, further comprising an illumination condition changing mechanism that changes an illumination condition in the illumination field formed on the mask, or in the exposure field of the projection system formed on the photosensitive substrate; and wherein:

the first illumination adjustment mechanism, the second illumination adjustment mechanism, the first telecentricity adjustment mechanism and the second telecentricity adjustment mechanism perform their respective adjustments according to a change of the illumination condition made by the illumination condition changing mechanism.

18. (Original) A method of fabricating a micro-device utilizing the exposure apparatus of claim 1, comprising the steps of:

illuminating the mask using the illumination optical system of claim 1; and

exposing an image of the pattern of the mask onto the photosensitive substrate using the projection system of claim 1.

19. (Previously Presented) An exposure apparatus comprising:

an illumination optical system having a plurality of reflective components that guide a radiation beam to a mask;

a projection system that projects a pattern of the mask onto a photosensitive substrate;

a drive that relatively moves the photosensitive substrate and the mask with respect to the projection system along a specified scanning exposure direction;

a first telecentricity adjustment mechanism that applies an oblique component to telecentricity in one of: (a) an exposure field of the projection system, and (b) an illumination field formed on the mask; and

a second telecentricity adjustment mechanism that adjusts telecentricity changing in accordance with a position from an optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask;

wherein the first and second telecentricity adjustment mechanisms respectively adjust at least some of the plurality of reflective components of the illumination optical system.

20. (Original) The exposure apparatus of claim 19, wherein the second telecentricity adjustment mechanism moves a reflective component that is adjusted by the first telecentricity adjustment mechanism in a direction different from a direction in which the reflective component is moved by the first telecentricity adjustment mechanism.

21. (Original) The exposure apparatus of claim 19, wherein the second telecentricity adjustment mechanism moves a reflective component that is different from a reflective component that is adjusted by the first telecentricity adjustment mechanism in a direction different from a direction in which the reflective component is moved by the first telecentricity adjustment mechanism.

22. (Previously Presented) The exposure apparatus of claim 19, wherein the illumination optical system comprises:

a radiation source that outputs the radiation beam;

a reflective integrator that makes uniform an illumination distribution of radiation from the radiation beam on the photosensitive substrate or the mask; and

a radiation guiding optical system arranged between the radiation source and the reflective integrator that guides the radiation beam from the radiation source to the reflective integrator.

23. (Original) The exposure apparatus of claim 19, wherein the projection system includes an exposure field that is decentered with respect to the optical axis, and the illumination optical system forms the illumination field at a position on the mask that is decentered with respect to the optical axis of the projection system.

24. (Original) The exposure apparatus of claim 19, further comprising an illumination condition changing mechanism that changes an illumination condition in the illumination field formed on the mask, or an illumination condition in the exposure field of the projection system formed on the photosensitive substrate, and wherein:

the first telecentricity adjustment mechanism and the second telecentricity adjustment mechanism perform their respective adjustments according to the change of the illumination condition made by the illumination condition changing mechanism.

25. (Original) A method of fabricating a micro-device utilizing the exposure apparatus of claim 19, comprising the steps of:

illuminating the mask using the illumination optical system of claim 19; and

exposing an image of the pattern of the mask onto the photosensitive substrate using the projection system of claim 19.

26. (Original) A method of exposing a pattern of a mask onto a photosensitive substrate, the method comprising the steps of:

forming an illumination field on the mask, the illumination field being decentered with respect to an optical axis of a projection system;

projecting the pattern of the mask onto the photosensitive substrate with the projection system, the projection system having an exposure field that is decentered with respect to the optical axis;

relatively moving the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system;

adjusting an illumination characteristic along the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask;

adjusting an illumination characteristic in a direction crossing the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask;

applying an oblique component to telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask; and

adjusting telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

27. (Original) The method of claim 26, wherein the illumination optical system forms an arcuate illumination field on the mask in the direction crossing the scanning exposure direction.

28. (Original) The method of claim 26, wherein the illumination characteristic along the scanning exposure direction is adjusted by applying an illumination distribution component that is inclined along the scanning exposure direction, and the illumination characteristic in the direction crossing the scanning exposure direction is adjusted by applying an illumination distribution component that is inclined along the direction crossing the scanning exposure direction.

29. (Original) The method of claim 26, wherein the illumination optical system includes a plurality of illumination optical components, and the illumination characteristics along the scanning exposure direction and along the direction crossing the scanning exposure direction are adjusted by moving or inclining at least one common illumination optical component among the plurality of illumination optical components in mutually different directions.

30. (Original) The method of claim 29, wherein the oblique component to telecentricity is applied by adjusting an illumination optical component that is different from the at least one common illumination optical component, and the telecentricity changing in accordance with a position from the optical axis is adjusted by adjusting an illumination optical component that is different from the illumination optical component adjusted to apply the oblique component to telecentricity.

31. (Original) The method of claim 29, wherein the oblique component to telecentricity is applied by adjusting an illumination optical component that is different from the at least one common illumination optical component, and the telecentricity changing in accordance with a position from the optical axis is adjusted by adjusting an illumination optical

component that is the same as the illumination optical component adjusted to apply the oblique component to telecentricity.

32. (Original) The method of claim 26, wherein the illumination optical system includes a plurality of illumination optical components, and the illumination characteristics along the scanning exposure direction and along the direction crossing the scanning exposure direction are adjusted by moving or inclining different illumination optical components among the plurality of illumination optical components in mutually different directions.

33. (Previously Presented) The method of claim 32, wherein the oblique component to telecentricity is applied by adjusting an illumination optical component that is different from the different illumination optical components, and the telecentricity changing in accordance with a position from the optical axis is adjusted by adjusting an illumination optical component that is different from the illumination optical component adjusted to apply the oblique component to telecentricity.

34. (Previously Presented) The method of claim 32, wherein the oblique component to telecentricity is applied by adjusting an illumination optical component that is different from the different illumination optical components, and the telecentricity changing in accordance with a position from the optical axis is adjusted by adjusting an illumination optical component that is the same as the illumination optical component adjusted to apply the oblique component to telecentricity.

35. (Original) The method of claim 26, wherein the illumination optical system includes a plurality of reflective components, and the illumination characteristics along the scanning exposure direction and along the direction crossing the scanning exposure direction, the oblique component to telecentricity, and the telecentricity changing in accordance with a position from the optical axis are adjusted by adjusting a position of at least some of the reflective components of the illumination optical system.

36. (Original) The method of claim 35, wherein the illumination characteristics along the scanning exposure direction and along the direction crossing the scanning exposure direction are adjusted by inclining a common reflective component about mutually different axes of rotation.

37. (Original) The method of claim 35, wherein the oblique component to telecentricity and the telecentricity changing in accordance with a position from the optical axis are adjusted by moving the same reflective component in mutually different directions.

38. (Original) The method of claim 35, wherein the illumination characteristics along the scanning exposure direction and along the direction crossing the scanning exposure direction are adjusted by moving a common reflective component in different directions.

39. (Original) The method of claim 36, wherein the oblique component to telecentricity and the telecentricity changing in accordance with a position from the optical axis are adjusted by moving the same reflective component in mutually different directions.

40. (Original) The method of claim 39, wherein the illumination characteristics along the scanning exposure direction and along the direction crossing the scanning exposure direction are adjusted by adjusting a reflective component that is different from a reflective component moved to adjust the oblique component to telecentricity and the telecentricity changing in accordance with a position from the optical axis.

41. (Original) The method of claim 26, further comprising:

changing an illumination condition in the illumination field formed on the mask, or in the exposure field of the projection system formed on the photosensitive substrate; and wherein:

the illumination characteristics along the scanning exposure direction and along the direction crossing the scanning exposure direction, the oblique component to telecentricity,

and the telecentricity changing in accordance with a position from the optical axis are adjusted according to the change made to the illumination condition.

42. (Original) A method of exposing a pattern of a mask onto a photosensitive substrate, the method comprising the steps of:

forming an illumination field on the mask, the illumination field being decentered with respect to an optical axis of a projection system;

projecting the pattern of the mask onto the photosensitive substrate with the projection system, the projection system having an exposure field that is decentered with respect to the optical axis;

relatively moving the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system;

applying an oblique component to telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask; and

adjusting telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask;

wherein the oblique component to telecentricity and the telecentricity changing in accordance with a position from the optical axis are adjusted by moving at least some of the plurality of reflective components of the illumination optical system.

43. (Original) The method of claim 42, wherein the oblique component to telecentricity is adjusted by moving a reflective component in a direction different from a direction in which the reflective component is moved in order to adjust the telecentricity changing in accordance with a position from the optical axis.

44. (Original) The method of claim 42, wherein the oblique component to telecentricity is adjusted by moving a reflective component that is different from a reflective

component that is moved in order to adjust the telecentricity changing in accordance with a position from the optical axis.

45. (Original) The method of claim 42, wherein the projection system includes an exposure field that is decentered with respect to the optical axis, and the illumination optical system forms the illumination field at a position on the mask that is decentered with respect to the optical axis of the projection system.

46. (Original) The method of claim 42, further comprising:

changing an illumination condition in the illumination field formed on the mask, or an illumination condition in the exposure field of the projection system formed on the photosensitive substrate, and wherein:

the oblique component to telecentricity and the telecentricity changing in accordance with a position from the optical axis are adjusted according to the change made to the illumination condition.

47. (Previously Presented) An exposure apparatus comprising:

a projection system having an exposure field that is decentered with respect to an optical axis in order to project a reduction image of a pattern formed on a mask onto a photosensitive substrate;

an illumination optical system that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system;

a drive that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and

an illumination adjustment mechanism that adjusts at least one of an illumination characteristic along the scanning exposure direction and an illumination characteristic crossing the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

48. (Previously Presented) The exposure apparatus of claim 47, wherein the illumination optical system includes a plurality of illumination optical components, and the illumination adjustment mechanism moves and/or inclines at least one illumination optical component among the plurality of illumination optical components.

49. (Previously Presented) The exposure apparatus of claim 48, wherein the illumination adjustment mechanism applies at least one of an illumination distribution component that is inclined along the scanning exposure direction, and an illumination distribution component that is inclined along the direction crossing the scanning exposure direction.

50. (Previously Presented) The exposure apparatus of claim 47, further comprising:

a first telecentricity adjustment mechanism that applies an oblique component to telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask; and

a second telecentricity adjustment mechanism that adjusts telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

51. (Previously Presented) The exposure apparatus of claim 47, wherein the illumination adjustment mechanism applies at least one of an illumination distribution component that is inclined along the scanning exposure direction, and an illumination distribution component that is inclined along the direction crossing the scanning exposure direction.

52. (Previously Presented) An exposure apparatus comprising:

a projection system having an exposure field that is decentered with respect to an optical axis in order to project a reduction image of a pattern formed on a mask onto a photosensitive substrate;

an illumination optical system that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system;

a drive that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and

a telecentricity adjustment mechanism that applies an oblique component to telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

53. (Previously Presented) The exposure apparatus of claim 52, further comprising:

another telecentricity adjustment mechanism that adjusts telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

54. (Previously Presented) The exposure apparatus of claim 53, wherein the illumination optical system includes a plurality of illumination optical components, and the telecentricity adjustment mechanism and the another telecentricity adjustment mechanism adjust a position of at least one of the illumination optical component of the illumination optical system.

55. (Previously Presented) An exposure apparatus comprising:

a projection system having an exposure field that is decentered with respect to an optical axis in order to project a reduction image of a pattern formed on a mask onto a photosensitive substrate;

an illumination optical system that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system;

a drive that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and

a telecentricity adjustment mechanism that adjusts telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

56. (Previously Presented) The exposure apparatus of claim 55, wherein the illumination optical system includes a plurality of illumination optical components, and the telecentricity adjustment mechanism adjusts the telecentricity by using at least one illumination optical component among the plurality of illumination optical components.

57. (Previously Presented) The exposure apparatus of claim 55, wherein the illumination optical system has an optical axis that is coaxial with the optical axis of the projection system.

58. (Previously Presented) The exposure apparatus of claim 57, wherein the illumination optical system includes an optical integrator,

the optical integrator includes a plurality of optical surfaces with a shape similar to a shape of the exposure field of the projection system.

59. (Previously Presented) The exposure apparatus of claim 58, wherein the plurality of optical surfaces of the optical integrator are arranged in an array.

60. (Previously Presented) The exposure apparatus of claim 59, wherein the illumination optical system forms an arcuate illumination field on the mask.

61. (Previously Presented) The exposure apparatus of claim 55, further comprising a telecentricity measurement system.

62. (Previously Presented) An exposure apparatus comprising:

a projection system having an exposure field that is decentered with respect to an optical axis in order to project a reduction image of a pattern formed on a mask onto a photosensitive substrate;

an illumination optical system that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system; and

a drive that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system,

wherein the illumination optical system has an optical axis that is optically coaxial with the optical axis of the projection system.

63. (Previously Presented) The exposure apparatus of claim 62, further comprising a telecentricity adjustment mechanism that adjusts telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system and (b) the illumination field on the mask.

64. (Previously Presented) The exposure apparatus of claim 63, further comprising another telecentricity adjustment mechanism that applies an oblique component to telecentricity in one of: (a) the exposure field of the projection system and (b) the illumination field on the mask.

65. (Previously Presented) The exposure apparatus of claim 62, wherein the illumination optical system includes an optical integrator,

the optical integrator includes a plurality of optical surfaces with a shape similar to a shape of the exposure field of the projection system.

66. (Previously Presented) The exposure apparatus of claim 65, wherein the plurality of optical surfaces of the optical integrator arc arranged in an array.

67. (Previously Presented) The exposure apparatus of claim 65, wherein the illumination optical system forms an arcuate illumination field on the mask.

68. (Previously Presented) The exposure apparatus of claim 62, further comprising:

a telecentricity adjustment mechanism that adjusts telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask,

wherein the illumination optical system includes a plurality of illumination optical components, and the telecentricity adjustment mechanism adjusts the telecentricity by using at least one illumination optical component among the plurality of illumination optical components.

69. (Previously Presented) A method of exposing a pattern of a mask onto a photosensitive substrate, the method comprising the steps of:

forming an illumination field on the mask, the illumination field being decentered with respect to an optical axis of a projection system;

projecting a reduced image of the pattern of the mask onto the photosensitive substrate with the projection system, the projection system having an exposure field that is decentered with respect to the optical axis;

relatively moving the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and

adjusting at least one of an illumination characteristic along the scanning exposure direction and an illumination characteristic crossing the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

70. (Previously Presented) The method of claim 69, wherein the illumination optical system includes a plurality of illumination optical components, and the illumination characteristics along the scanning exposure direction and the direction crossing the scanning exposure direction are adjusted by moving and/or inclining at least one illumination optical component in the illumination optical system.

71. (Previously Presented) The method of claim 70, wherein the step of adjusting an illumination characteristic applies at least one of an illumination distribution component that is inclined along the scanning exposure direction, and an illumination distribution component that is inclined along the direction crossing the scanning exposure direction.

72. (Previously Presented) The method of claim 69, further comprising the steps of:

applying an oblique component to telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask; and

adjusting telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

73. (Previously Presented) The method of claim 69, wherein the step of adjusting an illumination characteristic applies at least one of an illumination distribution component that is inclined along the scanning exposure direction, and an illumination distribution component that is inclined along the direction crossing the scanning exposure direction.

74. (Previously Presented) A method of exposing a pattern of a mask onto a photosensitive substrate, the method comprising the steps of:

forming an illumination field on the mask, the illumination field being decentered with respect to an optical axis of a projection system;

projecting the pattern of the mask onto the photosensitive substrate with the projection system, the projection system having an exposure field that is decentered with respect to the optical axis;

relatively moving the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and

applying an oblique component to telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

75. (Previously Presented) The method of claim 74, further comprising the steps of:

adjusting telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

76. (Previously Presented) The method of claim 75, wherein the illumination optical system includes a plurality of illumination optical components, and

the applying step and the adjusting step adjust a position of at least one of the illumination optical components of the illumination optical system.

77. (Previously Presented) A method of exposing a pattern of a mask onto a photosensitive substrate, the method comprising the steps of:

forming an illumination field on the mask, the illumination field being decentered with respect to an optical axis of a projection system;

projecting the pattern of the mask onto the photosensitive substrate with the projection system, the projection system having an exposure field that is decentered with respect to the optical axis;

relatively moving the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and

adjusting telecentricity in one of (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

78. (Previously Presented) The method of claim 77, wherein the illumination optical system includes a plurality of illumination optical components, and

the adjusting step adjusts a position of at least one of the illumination optical components of the illumination optical system.

79. (Previously Presented) The method of claim 78, wherein the illumination optical system has an optical axis that is coaxial with the optical axis of the projection system.

80. (Previously Presented) The method of claim 79, wherein the forming step includes a step of using an optical integrator,

the optical integrator includes a plurality of optical surfaces with a shape similar to a shape of the exposure field of the projection system.

81. (Previously Presented) The method of claim 80, wherein the plurality of optical surfaces of the optical integrator are arranged in an array.

82. (Previously Presented) The method of claim 81, wherein the forming step forms an arcuate illumination field on the mask.

83. (Previously Presented) The method of claim 77, further comprising the step of measuring telecentricity in one of (a) the exposure field of the projection system, and (b) the illumination field on the mask.

84. (Previously Presented) A method of exposing a pattern of a mask onto a photosensitive substrate, the method comprising the steps of:

forming an illumination field on the mask, the illumination field being decentered with respect to an optical axis of a projection system;

projecting the pattern of the mask onto the photosensitive substrate with the projection system, the projection system having an exposure field that is decentered with respect to the optical axis; and

relatively moving the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system,

wherein the illumination optical system has an optical axis that is optically coaxial with the optical axis of the projection system.

85. (Previously Presented) The method of claim 84, further comprising the steps of:

adjusting telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

86. (Previously Presented) The method of claim 85, further comprising the steps of:

applying an oblique component to telecentricity in one of: (a) the exposure field of the projection system and (b) the illumination field on the mask.

87. (Previously Presented) The method of claim 84, wherein the forming step includes a step of using an optical integrator,

the optical integrator includes a plurality of optical surfaces with a shape similar to a shape of the exposure field of the projection system.

88. (Previously Presented) The method of claim 87, wherein the plurality of optical surfaces of the optical integrator are arranged in an array.

89. (Previously Presented) The method of claim 87, wherein the forming step forms an arcuate illumination field on the mask.

90. (Previously Presented) The method of claim 84, further comprising the steps of:

adjusting telecentricity in one of (a) the exposure field of the projection system, and (b) the illumination field formed on the mask,

wherein the illumination optical system includes a plurality of illumination optical components, and

the adjusting step adjusts a position of at least one of the illumination optical components of the illumination optical system.

91. (New) An exposure apparatus comprising:

a projection system having an exposure field that is decentered with respect to an optical axis in order to project a pattern formed on a mask onto a photosensitive substrate;

an illumination optical system that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system;

a drive that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system;

a first illumination adjustment mechanism that is connected to an optical member in an optical path of the illumination optical system and that adjusts an illumination characteristic along the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask;

a second illumination adjustment mechanism that is connected to an optical member in an optical path of the illumination optical system and that adjusts an illumination characteristic in a direction crossing the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask;

a first telecentricity adjustment mechanism that is connected to an optical member in an optical path of the illumination optical system and that applies an oblique

component to telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask; and

a second telecentricity adjustment mechanism that is connected to an optical member in an optical path of the illumination optical system and that adjusts telecentricity changing in accordance with a position from the optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

92. (New) An exposure apparatus comprising:

an illumination optical system having a plurality of reflective components that guide a radiation beam to a mask;

a projection system that projects a pattern of the mask onto a photosensitive substrate;

a drive that relatively moves the photosensitive substrate and the mask with respect to the projection system along a specified scanning exposure direction;

a first telecentricity adjustment mechanism that is connected to an optical member in an optical path of the illumination optical system and that applies an oblique component to telecentricity in one of: (a) an exposure field of the projection system, and (b) an illumination field formed on the mask; and

a second telecentricity adjustment mechanism that is connected to an optical member in an optical path of the illumination optical system and that adjusts telecentricity changing in accordance with a position from an optical axis in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask;

wherein the first and second telecentricity adjustment mechanisms respectively adjust at least some of the plurality of reflective components of the illumination optical system.

93. (New) An exposure apparatus comprising:

a projection system having an exposure field that is decentered with respect to an optical axis in order to project a reduction image of a pattern formed on a mask onto a photosensitive substrate;

an illumination optical system that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system;

a drive that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and

an illumination adjustment mechanism that is connected to an optical member in an optical path of the illumination optical system and that adjusts an illumination characteristic along the scanning exposure direction and an illumination characteristic crossing the scanning exposure direction in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

94. (New) An exposure apparatus comprising:

a projection system having an exposure field that is decentered with respect to an optical axis in order to project a reduction image of a pattern formed on a mask onto a photosensitive substrate;

an illumination optical system that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system;

a drive that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and

a telecentricity adjustment mechanism that is connected to an optical member in an optical path of the illumination optical system and that applies an oblique component to telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.

95. (New) An exposure apparatus comprising:

a projection system having an exposure field that is decentered with respect to an optical axis in order to project a reduction image of a pattern formed on a mask onto a photosensitive substrate;

an illumination optical system that forms an illumination field on the mask, the illumination field being decentered with respect to the optical axis of the projection system;

a drive that relatively moves the mask and the photosensitive substrate along a scanning exposure direction with respect to the projection system; and

a telecentricity adjustment mechanism that is connected to an optical member in an optical path of the illumination optical system and that adjusts telecentricity in one of: (a) the exposure field of the projection system, and (b) the illumination field formed on the mask.